

## WHAT IS CLAIMED IS:

1. A transport system, the system comprising:
  - a source having a number of encoders configured to packetize broadcast television signals; and
  - 5 a bi-directional data communication unit (BDCU) located remotely from the source and configured to communicate packetized data signals between customer equipment (CE) and a network according to data transmission protocols, the BDCU including a multiplexer for integrating the packetized television signals with the packetized data signals for transport to the CE in an integrated transport
  - 10 stream defined as a function of the data transmission protocols.
2. The system of claim 1 wherein the source includes at least one multiplexer configured to combine the packetized television signals into a multiple program transport stream (MPTS) prior to transport to the BDCU.
3. The system of claim 2 further comprising a network  
15 communicator configured to encapsulate the MPTS for network communication prior to transport to the BDCU.
4. The system of claim 3 further comprising a packet-switching network for transporting the encapsulated MPTS from the source to the BDCU.
5. The system of claim 1 further comprising a video server in  
20 configured for packetizing streaming video and wherein the multiplexer of the BDCU is configured to integrate the packetized streaming video with the packetized television signals and data signals for transport to the CE in the integrated transport stream.
6. The system of claim 5 further comprising a network  
25 communicator configured to encapsulate the packetized streaming video signals for network communication prior to transport to the BDCU.

7. A method of providing multimedia signals from a source to customer equipment (CE) in a system having a bi-directional data communication unit (BDCU) configured for communicating data signals between the CE and a network, the method comprising:

5 receiving the multimedia signals at the BDCU;  
integrating the received multimedia signals with a BDCU transport;  
and  
transmitting the integrated transport from the BDCU to the CE.

8. The method of claim 7 further comprising encapsulating the  
10 multimedia signals for network communication and transmitting the encapsulated multimedia signals over the network to the BDCU for integration with the data BDCU transport.

9. The method of claim 8 further comprising encapsulating the multimedia signals according to internet protocols (IP).

15 10. The method of claim 9 further comprising configuring the multimedia signals according to real-time transport protocols (RTP) prior to encapsulation.

11. The method of claim 10 further comprising configuring the  
RTP multimedia signals according to user datagram protocols (UDP) or transmission  
20 control protocols (TCP) prior to encapsulation.

12. The method of claim 7 further comprising multiplexing the multimedia signals into a transport and transmitting the transport to the BDCU for integration with the BDCU transport.

13. The method of claim 12 further comprising configuring the  
25 transport according to MPEG-2 protocols.

14. The method of claim 7 further comprising configuring the multimedia signals to include audio and video elements.

15. The method of claim 7 further comprising configuring the multimedia signals to include program specific information (PSI) or system information (SI).  
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16. The method of claim 7 further comprising configuring the BDCU for communicating the integrated signals according to data over cable service interface specifications (DOCSIS) transport.

17. A method of transporting broadcast television signals, the  
10 method comprising:

packetizing the television signals;  
integrating the television packets into a DOCSIS transport; and  
transporting the packetized television signals through the DOCSIS transport to customer equipment (CE).

15 18. The method of claim 17 further comprising multiplexing the packetized television signals into a MPEG-2 transport at a cable headend, transmitting the MPEG-2 transport from the headend to the a cable modem termination station (CMTS), and integrating the television packets carried in the MPEG-2 transport with the DOCSIS transport at the CMTS.

20 19. The method of claim 18 further comprising encapsulating the MPEG-2 transport stream according to internet protocols (IP) and transporting the MPEG-2 transport from the headend to the CMTS over a packet switching network as a function of the IP.

25 20. A cable system for transporting broadcast television signals, the system comprising:  
a headend configured to packetize the television signals;

a cable modem termination station (CMTS) in communication with the headend for integrating the television packets into a DOCSIS transport; and customer equipment (CE) configured to recover the packetized television signals from the DOCSIS transport.

5           21. The system of claim 20 wherein the headend includes a multiplexer for combining the packetized television signals into a MPEG-2 transport for output to the CMTS.

10           22. The system of claim 21 further comprising a network communicator in communication with the headend and a packet switching network associate with the headend, the network communicator configured to encapsulate the MPEG-2 transport stream according to internet protocols (IP) for transport over the packet switching network to the CMTS.

15           23       The system of claim 20 wherein headend includes a video server configured to packetize streaming video signals and wherein the CMTS is configured to integrated the streaming video signals with the television packets into the DOCSIS transport.

20           24. The system of claim 23 further comprising a network communicator in communication with the headend and a packet switching network associate with the headend, the network communicator configured to encapsulate the packetized streaming video signals according to internet protocols (IP) for transport over the packet switching network to the CMTS.